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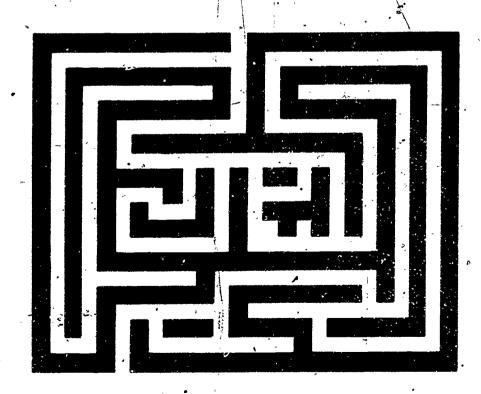
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Tangible Benefits of the Study of Latin: A Review of Research

**Rudolph Masciantonio** 



ERIC Clearinghouse on Languages & Linguistics Center for Applied Linguistics; 1611 North Kent St., Arlington, Virginia 22209

# Tangible Benefits of the Study of Latin: A Review of Research

Rudolph Masciantonio

ABSTRACT This article examines the linguistic , benefits of Latin in light of recent research which seems to document the relevance of Latin in building English vocabulary and reading skills. Evidence is cited from eight educational projects in which an experimental group of students taking Latin, and a control group not taking Latin, were pretested, posttested, and compared with regard to English yerbal skills. In each case, the Latin students showed significant gains over the control group. Other studies supporting these findings are

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Introduction

Eloquent apologize for the study of Latin, stressing various aspects of its relevance, have been made from time to time. The relevance seems to fall under four\_headings, viz., linguistic, aesthetic, socio-political and ethical. The purpose of this article is to examine the linguistic benefits of Latin in light of recent research.

The linguistic relevance of Latin stems from the fact that the English vocabulary that pupils hear, speak, read, and write is derived largely from Latin. The technical vocabularies of such fields as medicine, biology, psychology, chemistry. pharmacology, space science, philosophy, religion,

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1. John F. Latimer, The New Case for Latin and the Classics (Washington, D.C.: Council for Basic Education, 1973); William R. Parker, "The Case for Latin," Publications of the Modern Language Association, 79 (1964), 3-10.



tions and advertising media are replete with allusions to classical mythology, history, and the Latin language. English literature is frequently modelled on the literature of Creco-Roman antiquity or contains references to Latin and the classical heritage. Latin phrases and quotations occur in everyday life. The languages used today in many

and law are drawn from Latin. The communica-

Research studies seem to document the relevance of Latin in building the English vocabulary and reading skills of pupils.

countries in Europe, Latin American, Africa, and Asia likewise bear the strong imprint of classical influence.

Lexically, Latin has much in common

English and can be used as a valuable instrument for building the English vocabulary of students. Latin roots, prefixes, and suffixes may be keys for unlocking the meanings of English derivatives and cognates. A pupil who knows the meaning of the Latin word aqua (water) finds such English words as aquarium, aquéduct, aquatic, aquamarine, Aquarius and aquaeous easier to understand. Structurally, Latin'is very different from English in that it is highly inflected and does not have the rigid word order requirements of English. Latin works' differently from English and thereby affords Latin students the opportunity to step out-

Recent research studies seem to document the linguistic relevance of Latin in building the English vocabulary and reading skills of pupils of all backgrounds and abilities. With renewed attention being given to basic skills in American education, there is strong reason to offer serious consideration to these studies.

side of their own language and acquire a Sprach-

gefühl-a linguistic instinct-that is helpful in

Philadelphia

One such study involved the elementary school Latin program in the School District of Philadelphia. 2 In 1970-71 over 4,000 fourth-, fifth-, and sixth-grade pupils in eighty-five elementary schools in the School District of Philadelphia received fifteen to twenty mittutes of daily instruction in Latin from itinerant Latin teachers. The teachers used new multisensory instructional materials prepared by the Division of Foreign Languages. Under the leadership of Eleanor L. Sandstrom, Director of Foreign Languages, the program has grown steadily over the years and as of June 1976 included over 14,000 pupils in 125 elementary schools. There are plans for extending the program to all elementary schools in the district.

The primary objectives of the program were:

- (1) To introduce children orally to basic Latin structure and vocabulary;
   (2) To extend the English vocabulary of
- (2) To extend the English vocabulary of children, especially through the study of Latin roots and affixes;
- To acquaint children with classical culture and its influence on the present; and
- (4) To stimulate interest on the part of pupils in the study of Latin, foreign languages, and the humanities.

The evaluative study, conducted by the Division of Instructional Research, showed that the program had achieved its goals. Pupils achievement of the first three goals was measured by criterion-referenced tests which contained items on Latin structure, classical culture, and English vocabulary. The 1971 v (Vocabulary) subtest of the Iowa Test of Basic Skills was used to compare pupils who had studied Latin with those who had not. Questionnaires were administered to pupils, parents, principals, and classroom-teachers in

order to assess their reactions to the program.

using English.

<sup>2.</sup> Robert M. Offenberg et al., Evaluation of the Elementary School (FLES) Latin Program 1970-71 (Philadelphia: School District of Philadelphia: 1971), ED 036 612. (Documents Identified by an ED number may be read on microfiche, at an ERIC library collection or ordered from the ERIC Document Reproduction Service, P.O. Box 196, Arlington, VA 22210. See Resources in Education (RIE) for ordering instructions. Those documents that are followed by an FL number have not yet been assigned an ED number. Corresponding ED numbers can be found in the cross-reference index that appears at the end of each monthly issue of RIE.)

The three major findings of the evaluation

- (i) Performance of Latin pupils on the lowa Vocabulary subtest was one full year higher than the performance of matched control
- (2) Latin publis achieved mastery of the course content in Latin language skills, knowledge of classical culture, and English vocabulary.
- (3) The survey of pupils, parents, principals, and classroom teachers showed that the Latin program had wide acceptance and

# Indianapolis

Another such study involved the elementary school Latin program in the Indianapolis Public Schools. In the summer of 1973, the Indianapolis Public Schools received a Title III ESEA grant to develop a three-year project predicated on the hypothesis that English lar, guage skills and control of syntactic structures can be measurably improved through participation in a specially designed Latin FLES program stressing the importance of Latin root words. Rita Sheridan, the Supervisor of Foreign Languages, was the project director. The general goals of this project were to assess whether or not the study of Latin and classical civilization would:

- (1) Expand the verbal functioning of sixthgrade children in English; and
- (2) Broaden their cultural horizons and stimulate interest in the humanities.

The project involved approximately 400 sixthigrade students in six schools. Two additional schools with a total of approximately 100 sixthgrade students were selected as control groups. All participating students were studying Latin and classical civilization in a program coordinated with work in their regular classes. There was a thirty-minute lesson each school day taught by a Latin specialist. The complete battery (Form H) of the intermediate Metropolitan Achievement

Rita Sheridan, ed., Jugmenting Reading Skills through Language Learning Transfer. FLES Latin Program Evaluation Reports, 1975-74, 1974-75, 1976-76 (Indianapolis: Indianapolis Public Schools, 1976), FL 003 366.

Test was used as a pretest in October 1973, and

Form R was used as a posttest in March 1974.

Performance of Latin pupils in Philadelphia was one full year higher than the. rerformance of matched control pupils.

At the end of the first year of the project, the experimental group showed within the five-month period between the pretest and the posttest a gain over the control group on the following subtests of the intermediate battery of the Metropolitan Achievement Test:

- (1) Eight months on Word Knowledge:
- (2) One year in Reading;
- (3) One year and one month in Language:
- (4) Four months in Spellings
- (5) Seven months in Math Computation:
- (6) Eight months in Math Concepts;
- (7) Nine months in Math Problem Solving: (8) Five months in Science; and
- (9) Seven months in Social Studies.

Results for all three years of the study were similar. In the evaluation of the 1975-76 school year, the pretest showed no significant differences between the experimental (i.e., Latin) group and the control group in the areas of Word Knowledge. Reading, Language, Math Somputation, Math Concepts, and Math Problem Solving. The control group did, however, surpass the experimental group by six months in the Spelling pretest. The posttest indicated that the Latin students surpassed the control group in all areas, including Spelling, by a substantial number of months, and in the Language test by a full year. Fifth-and sixthgrade classroom teachers were asked to write comments about the Latin program as part of the evaluation; these comments were in general very positive. Criterion-referenced tests indicated that the Latin students had mastered the content of the curriculum. The Indianapolis Public Schools plan to make the elementary school Latin program operative, in all elementary schools in the fall of 1977 in view of the proven effectiveness of the



program in upgrading basic skills of urban pupils of all backgrounds and abilities.

District of Columbia

Another study involved the elementary school Latin program in the public schools of the District of Columbia. Latin was found to boost pupils' reading scores. The study, conducted during the

The Latin students in
Indianapolis surpassed the
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language test by a full year.

1970-71 school year, involved 1,132 pupils in eleven public elementary schools and tested three hypotheses:

- (1) There are no significant differences in the reading achievement scores of a sample of sixth-grade students receiving batin instruction and students aking no foreign
- language instruction.

  (2) There are no significant differences between the reading achievement scores of sixth-grade students receiving French or Spanish instruction and students taking no foreign language instruction.
- (3) Reading achievement scores of students taking any kind of foreign language instruction do not differ significantly from each other.

Using English reading achievement scores in vocabulary, comprehension, and total reading as the basis of analysis, the students with Latin (ten classes) were found to be five months ahead of students receiving no foreign language instruction. Comparison between the French-Spanish classes (ten) and the non-foreign language classes (twenty-five) revealed a four-month edge for the

foreign language classes. The Latin group had only one year of instruction, while the French-Spanish groups had four years of instruction. (Latin instruction begins in sixth grade, while Spanish and French begin in third.) It should be noted that most sixth-grade classes taking Latin, which were randomly selected, contained pupils who were not reading at grade level. With the decentralization of the Washington, D.C., school system, all elementary school language programs have been severely curtailed.

Easthampton

A study of the fifth- and sixth-grade Latin program in Easthampton, Massachusetts, seemed to substantiate the findings in Philadelphia, Indianapolis, and Washington. A Latin program for fifth and sixth graders at the Park School in Easthampton was initiated by the Classics Department of the University of Massachusetts and the local public school district. The purpose of the program was to stimulate and strengthen the students' reading skills in English--many of whom

The students with Latin in the District of Columbia were found to be five months ahead of students receiving no FL instruction.

read below grade level--and to provide cultural enrichment. Two hundred and fifty pupils in nine classes received twenty minutes of instruction daily. Activities included conversation in Latin, word games on English derivatives, constructing models, and producing Latin plays based on mythology.



Evaluation of the FLES Latin Program in the Washington,
 D.C., Feblic Schools, 1970-71 (Washington, D.C.: Public Schools of the District of Columbia, 1971), ED 060 695.

<sup>5.</sup> Rudolph Masciantonio. "In the Schools," Classical World, 68 (1975), 444; also, personal correspondence with Lorilei Burns, who conducted the research in cooperation with the University of Massachuse'ts at Amberst.

For evaluation purposes, pre- and posttests of the Vocabulary Section of the Stanford Achievement Test were administered. The scores of the Latin pupils (experimental group) were compared with the scores of the previous sixth-grade class, which did not have Latin (control group). Latin pupils showed marked improvement in all six categories evaluated, e.g., eleven percent more than the control group scored above grade level, and twenty-four percent more than the control group showed more than two years' growth. Despite the success and popularity of the program, the local school district was unwilling to absorb the cost of the program when special funding ended.

# Erie County

A study at North East High School in Erie County, Pennsylvania, 6 looked at the effect of Latin on College Entrance Examination Board scores, English grades, and vocabulary growth. Students ir this school are drawn equally from urban and rural areas; 352 pupils were selected at random for the study. The experimental group (Latin pupils) was matched with the control group (pupils not studying Latin) in terms of LQ, and grade level. Performances were compared in the following areas:

- (1) The School and College Ability Test-Verbal; (2) The College Entrance Examination Board
- Scholastic Aptitude Test;
- (3) Grades in the two most recent semesters of English; and
   (4) The Nationwide English Vocabulary Examination-1961.

Comparisons between the two groups showed that a background in Latin was an aid to higher scores in all areas listed. The study of Latin contributed to better performance on tests in vocabulary and verbal ability, and in higher grades

6. Katherine M. Riley, A Comparative Investigation into the Effects of a Study of Latin on Scores in Vocabulary and Verbal Ability Tests and on Grade in English of High School Students (1969). (Available from Robert Dobroski, Classical Language Advisor, Department of Education, Box 911, Education Bullding, Commonwealth of Pennsylvania, Harrisburg, PA 17126.)

in English. This Latin program is ongoing at the time of writing.

#### Alexandría

A Latin pilot study<sup>7</sup> at the elementary school level was initiated by the Alexandria (Va.) City

The study of Latin contributed to better performance on tests in vocabulary and verbal ability, and in higher grades in English.

Public Schools in 1972-73 and continued into 1973-74. The project, under the Pilot Studies Program of the Virginia State Department of Education, received matching funds and technical assistance through the Department's Division of Education Research and Statistics. The purpose of the project was to increase the English reading skills of pupils. One teacher served in two elementary schools.

Control groups in two comparable schools not

having Latin were set up. Experimental (i.e., Latin) and control groups in grades 5 ar 1 ' were pretested and posttested with the SRA (Science Research Associates) Assessment Survey; the Gates-MacGinitie Vocabulary, Comprehension, Speed, and Accuracy Tests; and the Slosson Oral Reading Test. The experimental group did perform better than the control group on the Slosson Oral Reading Test in the posttest. No other statistically significant differences were observed between the control and experimental groups in the posttests. The small size (eighteen pupils) of the control group (caused by massive school reorganization during the study to achieve racial



<sup>7.</sup> Jean W. Payne, ed., Final Report, Latin Pilot Study Alexandria, Va.: Alexandria City Public Schools, 1973), FL 008

integration), the difficulties involved in adjusting to a new school environment on the part of some students, and the reassignment of classroom teachers, administrative personnel, and pupils caused the researchers to call for further study under better conditions. Evaluations of the program made by the pupils themselves, their parents, classroom teachers, consultants, administrators, and State Department of Education personnel were very positive. The local school district, however, did not continue the program.

Los Angeles

A recent study evaluated the Los Angeles Unified School District's elementary school Latin program in terms of its English reading vocabulary and comprehension objectives. The Latin program began in 1975 in two schools and was expanded to thirty schools with a Title III ESEA grant in 1975-76. The program-called the Language

The project in Los Angeles was successful in improving the reading vocabulary and comprehension scores by more than one month for each month of instruction.

Transfer Project—was initiated under the direction of E. Jules Mandel, Foreign Language Instructional Specialist. Daily Latin instruction is presented by fifth- and sixth-grade teachers for twenty minutes as part of the language arts bloc. The program was expanded to include more classes in the 1976-77 school year. Most of the fifth- and sixth-grade teachers have a background in Latin or

8. Evaluators' Report on the Project "Extending Reading Comprehension Skills through Language Transfer (Los Angeless Los Angeles Unified School District, 1976).

another foreign language and are given special inservice training to teach Latin. They are also given carefully structured curriculum materials to use and frequent supervisory service.

A pretest-posttest design was employed with the Comprehensive Test of Basic Skills. Comparison groups were also pre- and posttested. Objectives relating to vocabulary, word analysis, and other language and cultural concepts were assessed with criterion-referenced tests. Differences in scores were tested for significance, where appropriate. Self-concept was assessed with the Far West Regional Laboratory Self Concept Scale in a posttest-only design. Differences in mean scores between target and comparison groups were tested for significance. Student interests and attitudes were assessed with rating scales.

At the fifth-grade level, the mean gain in vocabulary of target students was eight months; the comparison group's gain was six months. At the sixth-grade level, the mean gain of target students was nine months; the comparison group's gain was six months. The scores of the targetgroup students on criterion-referenced tests of word origin and Roman history and culture indicated mastery in these areas. The self-concepts and interest in language study were significantly higher for target students than for comparison pupils. Rating by target students indicated high interest in the project. Researchers concluded that the project was successful in improving the reading vocabulary and comprehension scores of target students by more than one month for each month of instruction. The project was successful in improving student knowledge of word origin, Roman history and culture, and structural analysis skills. The project was effective in increasing the self-concept and interest in language study of students. The Latin program in Los Angeles is ongoing, and there are plans for expanding it.

### Worcester

Seventh-grade children in the Providence Street Junior High School n Worcester, Massachusetts, have shown dramatic improvement in



their English vocabulary and reading comprehension scores as a result of participation in an innovative Latin program begin in 1975. Children with reading scores at the 45 to 5.5 grade level in September 1975 increased their vocabulary scores by fourteen months and their reading comprehension by nineteen months in one school year. Generally, students this far behind would be expected to progress about six months. The Latin program attempts to give students a feeling for myth and poetry, as well as to interest them in the study of etymology.

Two groups were selected from the incoming seventh graders. The pilot group took Latin five times a week, and the control group followed the regular program without Latin. Pupils were selected at random from those scoring 1.5 to 2.5 grades below reading level. Letters explaining the goals and objectives were sent to the parents of the pilot group. Leo Glennon, supervisor of the testing program for the Worcester school system, developed a pre- and posttest program for the course. Pilot-group pupils outstripped their

Pilot-group pupils outstripped the control-group pupils by 8 months in vocabulary scores and 13 months in reading comprehension scores.

counterparts in the control group by eight months in vocabulary scores and by thirteen months in reading comprehension scores. Researchers also point out improvement in self-image, motivation, and self-reliance in the pilot group. Research and testing of the program is continuing according to Anita L. Fish, Chairperson of the Foreign Language Department at the junior high school.

University of Illinois

A course in the enlargement of students! English vocabulary thorugh the study of Latin and Greek roots and their derivatives was evaluated at the University of Illinois. The course was developed by the Department of Classics out of concern over the national decline in the Scholastic Aptitude Test scores in verbal ability over the past several years. One component of the course makes use of computer-assisted instruction available on the PLATO IV system. Enrollment increased from thirty-five (fall 1974) to over 400 (fall 1975). A standardized vocabulary test is administered before the course begins and is repeated (in another form) at its conclusion. Thus far, all students have improved--some by as much as forty percentile ranks.

# Other Research

A publication of the Human Engineering Laboratory 10 cites two studies of the importance of learning a foreign language-Latin in particular-in the expansion of English vocabulary skills. In a Washington, D.C., study, the backgrounds in foreign language study of 220 adult native speakers of English were tabulated and compared to their English vocabulary test scores. Those with no foreign language background had an average English vocabulary percentile of 28; those with Latin and another language averaged 58.

In a related study, reported in the same Bullztin, Richard Bowker conducted a preliminary examination of the effect of Latin study on vocabulary level. He administered a vocabulary test to two groups of juniors at a private secondary school in Boston; one group had had two years of Latin in addition to a modern language; the other group had taken two years of a modern language but no Latin. Bowker found that the Latin group



<sup>9.</sup> Richard T. Scanlan, A Computer-Assisted Instruction Course in Vocabulary Building through Latin and Greek Roots, Foreign Language Annals, 9 (1976), 379-83.

<sup>10.</sup> Bulletin No. 115 (Boston, Mass.: Human Engineering Laboratory).

scored higher than the non-Latin group on the vocabulary test.

Studies designed to show the effect of Latin on basic skills are in progress at this time in the Ithaca (N.Y.) Public Schools and the West Lafayette (Ind.) school system; results, however, are not yet available. Gilbert Lawall, President of the American Classical League, recently appointed a Committee on I atin and the Basic Skills to investigate further the relationship between the study of Latin and the improvement of basic language skills and to disseminate information about available

There seems to be a relationship between new approaches to the teaching of Latin and the improvement of basic skills.

research on this subject. The Committee on Classics in the Great Cities' Schools (which is affiliated with the American Classical League and the Classical Association of the Atlantic States) has been active since 1972 in bringing urban school administrators information about the potential of Latin in improving basic skills.

# Conclusion

reading skills:

Important implications stem from these research studies attesting to the tangible value of Latin in building students English vocabulary and

- (1) Responsible educational administrators and curriculum specialists in 'Latinless' or nearly 'Latinless' schools should consider what Latin could do for their pupils. Such consideration is especially merited in light of the recent concern over basic skills, SAT scores, and functional illiteracy among high school graduates.
- (2) Efforts to disseminate information about this research on the linguistic relevance of Latin and to implement new programs in light of this research deserve the broadest possible support. The foreign language profession should assume a leadership role in this area.

(3) Educational decision-makers sometimes tend to ignore the hard research data' they demand for budgetary, political, or other reasons. This tendency is seen in the case of a few of the programs described here which are no longer in existence—despite impressive gains by students. The tendency

Decision-makers sometimes tend to ignore the research data they demand for budgetary, political, or other reasons.

is unconscionable and should be combated vigorously by responsible educators.

(4) There seems to be a relationship between

- new approaches to the teaching of Latin and the improvement of basic skills. The new approaches sometimes involve multisensory media, structural linguistics, the direct method, programmed and computerassisted instruction, and attention to the affective domain. They likewise make extension of English verbal functioning a specific goal. In other words, it is not the traditional grammar-translation approach that has yielded the positive results indicated in this article; rather, it is programs that involve radical reform of both curriculum content and instructional strategies.
- (5) While giving deserved attention to the tinguistic relevance of Latin and its new 'practicality,' we should not overlook the substantial aesthetic, sociol political, and ethical relevance of Latin. These other benefits are not readily measurable and observable, but they are very real and important to students.

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